

# Vamanopaga Dasaimani: A Classical and Pharmacodynamic Review of Adjuvant Drugs in Vamana Karma

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## Abstract

**Background:** *Vamana Karma* is a principal bio-purificatory procedure of Panchakarma indicated predominantly in *Kapha*-dominant disorders. Classical Ayurvedic literature describes specific adjuvant drugs under the group *Vamanopaga Dasaimani* that facilitate safe and effective therapeutic emesis.

**Objective:** To critically analyze the classical description, pharmacodynamic properties, and probable physiological mechanisms of *Vamanopaga Dasaimani* with contemporary correlation.

**Methods:** A narrative review was conducted based on classical Ayurvedic texts including the Charaka Samhita and Ashtanga Hridaya, supported by standard Dravyaguna literature and Panchakarma textbooks. Pharmacodynamic attributes (*Rasa*, *Guna*, *Veerya*, *Vipaka*) and modern physiological mechanisms were analyzed descriptively.

**Results:** *Vamanopaga Dasaimani* consists of ten drugs—*Madhu*, *Madhuka*, *Kovidara*, *Karbudara*, *Nipa*, *Vidula*, *Bimbi*, *Sanapushpi*, *Sadapushpa*, and *Pratyak pushpa*. These drugs exhibit *Kapha-hara* properties, facilitate *Dosha* movement to the *Amashaya*, stimulate the emetic reflex through gastric distension and mucosal stimulation, and provide mucosal protection. Their actions correlate with activation of vagal afferents and the medullary vomiting center.

**Conclusion:** *Vamanopaga* drugs play a crucial supportive role in *Vamana Karma* by enhancing efficacy while preventing complications. Classical descriptions demonstrate remarkable alignment with modern understanding of the emetic pathway, warranting further pharmacological and clinical validation.

**Keywords:** *Vamana karma*, *Vamanopaga Dasaimani*, *Panchakarma*, *Dravyaguna*

## 1. INTRODUCTION

*Panchakarma* constitutes the detoxification and bio-purification therapy of Ayurveda. Among its five primary procedures, *Vamana karma* is indicated for expelling aggravated *Kapha Dosha* through the upper gastrointestinal route. The Charaka Samhita enumerates fifty *Mahakashayas* (therapeutic groups) in *Sutrasthana*, among which *Vamanopaga Dasaimani* is listed as the 23rd group.<sup>1</sup>

Vamana is defined as the therapeutic expulsion of vitiated *Doshas* via the oral route.<sup>1</sup> The term “*Upaga*” denotes substances that assist or facilitate the primary procedure. Thus, *Vamanopaga* drugs are supportive agents administered along with *Vamaka* drugs to enhance therapeutic efficacy and reduce adverse effects.

The Ashtanga Hridaya further elaborates the indications and mechanism of Vamana in Kapha-dominant diseases affecting the *Amashaya* and *Uras*.<sup>2</sup>

Although *Vamana* is widely practiced in *Panchakarma*, the supportive role of *Vamanopaga Dasaimani* has received limited analytical attention. This review aims to provide a classical and pharmacodynamic interpretation of these drugs.

## 2. MATERIALS AND METHODS

This study is a classical narrative review.

### 2.1 Data Sources

Primary Ayurvedic references:

- Charaka Samhita<sup>1</sup>
- Ashtanga Hridaya<sup>2</sup>
- Bhavaprakasha Nighantu<sup>3</sup>
- Dhanwantari Nighantu<sup>4</sup>

Secondary references:

- Patil VC. Principles and Practice of Panchakarma<sup>5</sup>
- Kar PK. Mechanism of Panchakarma<sup>6</sup>
- Textbook of DravyagunaVijnana<sup>7</sup>
- Indian Medicinal Plants (Kottakkal)<sup>8</sup>

### 2.2 Method of Analysis

Classical descriptions were compiled and interpreted under:

*Rasa* (taste), *Guna* (qualities), *Veerya* (potency), *Vipaka* (post-digestive effect), *Dosha Karma*

Modern physiological correlation was made with established mechanisms of emesis.

## 3. RESULTS

### 3.1 Composition of *Vamanopaga Dasaimani*

Table no:1 Botanical identity of *Vamanopaga Dasaimani*

| Sl. No. | Drug Name        | Botanical Name                                       | Family    |
|---------|------------------|------------------------------------------------------|-----------|
| 1       | <i>Madhu</i>     | (Natural product from <i>Apis</i> species)           | Apidae    |
| 2       | <i>Madhuka</i>   | <i>Glycyrrhiza glabra</i>                            | Fabaceae  |
| 3       | <i>Kovidara</i>  | <i>Bauhinia variegata</i> / <i>Bauhinia purpurea</i> | Fabaceae  |
| 4       | <i>Karbudara</i> | <i>Bauhinia acuminata</i>                            | Fabaceae  |
| 5       | <i>Nipa</i>      | <i>Neolamarckia cadamba</i>                          | Rubiaceae |

|    |                      |                                                                                      |                                        |
|----|----------------------|--------------------------------------------------------------------------------------|----------------------------------------|
|    |                      | (Syn. <i>Anthocephalus cadamba</i> )                                                 |                                        |
| 6  | <i>Vidula</i>        | <i>Barringtonia acutangula</i> /<br><i>Salix tetrasperma</i> / <i>Calamus rotang</i> | Lecythidaceae / Salicaceae / Arecaceae |
| 7  | <i>Bimbi</i>         | <i>Coccinia grandis</i>                                                              | Cucurbitaceae                          |
| 8  | <i>Sanapushpi</i>    | <i>Crotalaria verrucosa</i>                                                          | Fabaceae                               |
| 9  | <i>Sadapushpa</i>    | <i>Calotropis gigantean</i>                                                          | Apocynaceae                            |
| 10 | <i>Pratyakpushpa</i> | <i>Achyranthes aspera</i>                                                            | Amaranthaceae                          |

### 3.2 Pharmacodynamic Profile

**Table No. 2: Pharmacodynamic profile of Vamanopaga dasaimani<sup>1,3,4,9</sup>**

| Sl. No. | Drug (Sanskrit)      | Rasa                    | Guna                 | Veerya        | Vipaka         | Doshaghnata / Karma                             |
|---------|----------------------|-------------------------|----------------------|---------------|----------------|-------------------------------------------------|
| 1       | <i>Madhu</i>         | <i>Madhura, Kashaya</i> | <i>Laghu, Ruksha</i> | <i>Sheeta</i> | <i>Madhura</i> | <i>Tridosahara (Kapha-Pitta hara), Yogavahi</i> |
| 2       | <i>Madhuka</i>       | <i>Madhura</i>          | <i>Guru, Snigdha</i> | <i>Sheeta</i> | <i>Madhura</i> | <i>Vata-Pitta hara</i>                          |
| 3       | <i>Kovidara</i>      | <i>Kashaya</i>          | <i>Laghu, Ruksha</i> | <i>Sheeta</i> | <i>Katu</i>    | <i>Kapha-Pitta hara</i>                         |
| 4       | <i>Karbudara</i>     | <i>Kashaya</i>          | <i>Laghu</i>         | <i>Sheeta</i> | <i>Katu</i>    | <i>Kapha-Pitta hara</i>                         |
| 5       | <i>Nipa</i>          | <i>Kashaya, Tikta</i>   | <i>Laghu</i>         | <i>Sheeta</i> | <i>Katu</i>    | <i>Kapha-Pitta hara</i>                         |
| 6       | <i>Vidula</i>        | <i>Kashaya</i>          | <i>Laghu, Ruksha</i> | <i>Sheeta</i> | <i>Katu</i>    | <i>Kapha hara</i>                               |
| 7       | <i>Bimbi</i>         | <i>Tikta, Kashaya</i>   | <i>Laghu, Ruksha</i> | <i>Ushna</i>  | <i>Katu</i>    | <i>Kapha-Vata hara</i>                          |
| 8       | <i>Sanapushpi</i>    | <i>Tikta</i>            | <i>Laghu</i>         | <i>Ushna</i>  | <i>Katu</i>    | <i>Kapha-Vata hara</i>                          |
| 9       | <i>Sadapushpa</i>    | <i>Tikta, Katu</i>      | <i>Laghu, Ruksha</i> | <i>Ushna</i>  | <i>Katu</i>    | <i>Kapha-Vata hara</i>                          |
| 10      | <i>Pratyakpushpa</i> | <i>Katu, Tikta</i>      | <i>Laghu, Ruksha</i> | <i>Ushna</i>  | <i>Katu</i>    | <i>Kapha-Vata hara</i>                          |

The overall pharmacodynamic profile of *Vamanopaga Dasaimani* reveals a predominance of *Kashaya*, *Tikta*, and *Madhura Rasa*. The group is chiefly characterized by *Laghu* and *Ruksha Guna*, with certain drugs exhibiting *Sara* and *Tikshna* properties that facilitate mobilization and expulsion of *Doshas*. In terms of potency, most substances possess *Sheeta veerya*, although a few demonstrate functional *Ushna* attributes contributing to stimulatory action during *Vamana*. The *Vipaka* is predominantly *Katu*, supporting *Kapha-shamaka* activity at the post-digestive level. Collectively, these attributes confer a dominant *Kapha-hara* therapeutic effect, aligning with their indicated role as adjuvants in *Vamana karma*.

### 3.3 Classical Mode of Action

In classical Ayurvedic pharmacology, *Vamana dravyas* are characterized by *Ushna* (heating), *Tikshna* (sharp and penetrating), *Sukshma* (subtle), *Vyavayi* (rapidly diffusing before digestion), and *Vikasi* (loosening and dispersing) qualities. These attributes collectively enable the drugs to act swiftly at both systemic and gastrointestinal levels. *Ushna* and *Tikshna* properties help in dissolving and mobilizing aggravated Kapha by reducing its inherent heaviness and viscosity, a process described as *Dosha Vilayana* (liquefaction). *Vikasi guna* assists in loosening the compacted pathological accumulations adhered within channels (*Srotas*), facilitating *Dosha Vichchedana* (disintegration). *Sukshma* and *Vyavayi* qualities permit deeper tissue penetration and rapid systemic spread, enabling the morbid Doshas lodged in peripheral tissues (*Shakha*) to be redirected toward the central gastrointestinal tract (*Koshta*), particularly the *Amashaya*. Once accumulated in the stomach, stimulation of *Udana Vayu* governs the upward movement necessary for therapeutic expulsion.

Within this coordinated mechanism, *Vamanopaga* drugs function as modulatory adjuvants rather than primary emetics. Their pharmacodynamic attributes support the preparatory and protective aspects of *Vamana Karma*. By promoting mild liquefaction and facilitating the directional movement of Doshas to the *Koshta*, they ensure that the pathological material is adequately assembled before induction of emesis. Several *Vamanopaga* substances possess *Madhura* or *Kashaya Rasa* with *Snigdha* or *Sheeta* properties, which confer *Ropana* (healing) and *Shamana* (pacifying) actions on the gastric mucosa. This is particularly important because repeated emetic bouts can irritate the mucosal lining. Their inclusion helps maintain mucosal integrity, reduce inflammation, and prevent complications such as excessive irritation or tissue damage.

Furthermore, *Vamanopaga* drugs play a regulatory role in preventing *Ativamana* (excessive emesis). By moderating the intensity and frequency of vomiting, they help maintain therapeutic balance, ensuring complete yet controlled elimination of Kapha without inducing dehydration, fatigue, or trauma. Some components also enhance palatability and increase the volume or osmotic load of gastric contents, thereby supporting efficient expulsion through mechanical distension. Thus, *Vamana* and *Vamanopaga* drugs operate synergistically: the former initiate and drive the expulsive force, while the latter optimize mobilization, protect physiological structures, and maintain procedural equilibrium, ensuring that *Vamana Karma* remains both effective and safe.

### 3.4 Modern Physiological Correlation

The emetic reflex is a coordinated neuro-physiological response involving both central and peripheral mechanisms. It is initiated either by gastric irritation, excessive distension, or chemical stimulation of receptors located in the gastric and intestinal mucosa. Mechanical distension activates stretch receptors embedded in the gastric wall, while chemical stimuli stimulate chemoreceptors that transmit impulses through vagal and sympathetic afferent fibers to the vomiting center located in the medulla oblongata, closely associated with the nucleus tractus solitarius. This center integrates signals from the gastrointestinal tract, chemoreceptor trigger zone, vestibular system, and higher cortical centers. Once activated, efferent impulses are transmitted via the vagus, phrenic, and spinal nerves, leading to coordinated contraction of the diaphragm and abdominal musculature, relaxation of the lower esophageal sphincter, and forceful expulsion of gastric contents.<sup>10,11,12</sup>

## 4. DISCUSSION

The concept of *Vamanopaga Dasaimani* described in the Ashtanga Hridaya represents a rational therapeutic design rather than a mere list of adjuvant herbs. While *Vamaka* drugs are primarily responsible for initiating and driving the emetic process, *Vamanopaga* agents ensure that the procedure is efficient, controlled, and safe. Their importance lies in preparing the gastric environment, facilitating the mobilization of aggravated *Kapha*, protecting mucosal integrity, and preventing complications such as excessive vomiting (*Ativamana*).

Classically, these drugs are described as *Kapha-hara*, *Ropana* (healing), and supportive to *Vamana Karma*. *Madhu* (honey) improves palatability and enhances patient compliance, which is particularly important in *Akantapana* where large volumes must be consumed. Its classical description as *Yogavahi* (catalytic and synergistic) suggests that it enhances the action of co-administered drugs. From a modern physiological perspective, honey contains concentrated sugars that create a hyperosmotic environment within the stomach. This promotes osmotic influx of fluids into the gastric lumen, increasing intragastric volume and contributing to gastric distension—one of the key triggers for the emetic reflex. Additionally, honey exhibits antioxidant and epithelial healing properties, which help counteract mucosal stress during repeated bouts of vomiting.

*Madhuka* (*Glycyrrhiza glabra*) holds particular importance among *Vamanopaga* drugs. In Ayurvedic texts, it is described as *Madhura*, *Sheeta*, and *Ropana*, indicating soothing and restorative effects. Pharmacologically, glycyrrhizin—the principal active constituent—has demonstrated anti-inflammatory, anti-ulcer, and cytoprotective properties. It enhances mucus secretion, stabilizes epithelial membranes, and reduces inflammatory mediators. During *Vamana*, when mechanical stress and acidic exposure may irritate the gastric mucosa, *Madhuka* functions as a demulcent shield, preserving mucosal integrity without suppressing the desired emetic response.

Other members such as *Kovidara* and *Karbudara* are traditionally indicated for *Ropana* and *Kapha-shamana* effects. Though modern pharmacological data may be comparatively limited, many plants in these categories are known to contain tannins and bioactive phytochemicals that exert astringent and anti-inflammatory actions. Astringency (*Kashaya rasa*) helps in tissue contraction and local healing, potentially reducing mucosal irritation and minor erosions that may occur during emesis.

*Nipa* and *Vidula* are described as *Kapha*-pacifying and discomfort-relieving agents. Their probable pharmacological relevance lies in mild anti-inflammatory and carminative actions that may modulate gastric irritability and reduce abdominal discomfort. By preventing excessive irritation, these agents help regulate the intensity of vomiting, ensuring that the procedure achieves therapeutic elimination without causing undue strain.

From a physiological standpoint, the classical explanation of *Udana Vayu* stimulation correlates closely with activation of the medullary vomiting center. Gastric distension caused by *Akantapana* stimulates mechanoreceptors, while mild mucosal stimulation activates vagal afferent pathways. These signals converge at the nucleus tractus solitarius in the medulla, coordinating diaphragmatic and abdominal contractions necessary for expulsion. Thus, the Ayurvedic description of *Dosha Utklesha* (provocation), *Koshtagamana* (movement to the gut), and *Udana-prerita Urdhwagamana* (upward expulsion) reflects a functional understanding of neuro-gastroenterological pathways.

Importantly, the *Vamanopaga* group demonstrates a principle of therapeutic balance. They do not directly induce forceful emesis but optimize the internal milieu so that *Vamaka* drugs act effectively with minimal adverse effects. Their combined actions can be interpreted pharmacologically as:

- Induction of osmotic gastric distension
- Mild activation of vagal afferents
- Anti-inflammatory and mucoprotective effects
- Regulation and moderation of emetic intensity

Clinically, their *Kapha-hara* predominance justifies their use in *Kapha*-dominant disorders such as *Kasa* (cough), *Shwasa* (dyspnea), *Kushta* (skin disorders), *Meha* (metabolic disorders), and *Unmada* (psychological disturbances), as indicated in the *Ashtanga Hridaya*. By ensuring safe and controlled elimination, they enhance the therapeutic precision of *Vamana Karma*.

However, despite strong classical rationale and supportive pharmacological evidence for individual components such as honey and *Glycyrrhiza glabra*, well-designed controlled clinical trials evaluating the synergistic effects of the entire *Vamanopaga Dasaimani* group during Vamana Karma remain limited. Future interdisciplinary research integrating classical Ayurvedic principles with modern gastroenterology and clinical pharmacology could provide deeper insights into their collective efficacy and safety profile.

In summary, *Vamanopaga* drugs represent a sophisticated example of adjuvant therapy in Ayurveda—where efficacy, safety, and physiological harmony are simultaneously addressed.

## 5. CONCLUSION

*Vamanopaga Dasaimani* represents a thoughtfully structured adjuvant group designed to enhance the effectiveness and safety of *Vamana Karma*. By facilitating *Dosha* mobilization, supporting the emetic process, and protecting gastric tissues, these drugs embody a balanced therapeutic approach that integrates potency with procedural moderation. The classical pharmacodynamic rationale shows meaningful correspondence with modern emetic physiology, highlighting the depth of traditional clinical insight.

Future interdisciplinary research integrating Ayurvedic principles with modern pharmacological methods can strengthen the scientific foundation of *Vamana* therapy. Such validation would not only improve clinical confidence but also support the evidence-based integration of traditional *Panchakarma* procedures into contemporary healthcare systems.

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## 7. AUTHORS CONTRIBUTIONS

All the authors contributed equally in design and execution of the article.

## 8. CONFLICTS OF INTEREST

Nil

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